



LIVABLE COMMUNITIES

During the past two decades, population growth has occurred primarily within Region 7's urban areas as people move from rural locations. More than half of Region 7's population resides within the urban areas, yet Region 7 retains its original rural character. For example, 75 percent of the towns have populations of 1,000 or less.

Children's Health in Region 7

Research has shown that children may be more susceptible to diseases linked to environmental exposures. Many EPA actions are directed toward ensuring that America's children are protected from environmental health hazards. These actions include regulations and standards, science and risk assessment, public awareness, community-based programs, and education. While EPA's Office of Children's Health Protection is primarily involved with the first two, Region 7 is more involved in the latter components.

Region 7 contributes through Environmental Justice (EJ), Community-Based Environmental Protection (CBEP), Brownfields, the American Indian Program, and the Office of External Programs. For instance, the American Indian Program and the EJ program channel information and support into tribal lands to protect Region 7's Native American

children. The EJ, CBEP, and Brownfields programs/initiatives have helped to protect Region 7's minority and low-income children. All the community-based programs contribute to the protection of children's health and vitality, primarily through partnerships with other organizations and nonprofit agencies.

Each of these programs also relies on the expertise and efforts of partners to administer enforcement and ensure compliance with environmental regulations. Additionally, it has been through the tireless efforts of Region 7's major program divisions, which ensure clean air, water and land, that Region 7's children's health efforts have been successful. A perfect example is Superfund's lead removal activities. Certainly, it is this partnership of enforcement that is most effective in protecting children's health.

Lead

Despite significant reductions in blood lead levels over 15 years, lead poisoning remains a serious health risk for children. Iowa, Kansas and Missouri are delegated the authority to implement and enforce lead accreditation and certification programs. These responsibilities are handled by Region 7 in Nebraska and on tribal lands. The state

health departments in Iowa and Kansas are also expected to conduct the renovation and remodeling activities disclosure program in their states.

EPA and Housing and Urban Development implement the real estate notification and lead disclosure program in all states. EPA has funded a number of studies that indicate that both children and adults in localized parts of Region 7 have elevated blood lead levels – for example, in the inner cities of Omaha and St. Louis, and around old lead mining and smelter sites in Jasper County in Missouri and Cherokee County in Kansas.

Lead Removal is Top Priority in Jasper County, Missouri

The Jasper County Superfund site is an inactive lead-zinc mining and smelting area in southwestern Missouri. Mining operations began in the 1800s and included hundreds of mines and 17 smelters. One smelter in the City of Joplin, which operated until the 1970s, resulted in air emissions contaminating a large area of soil. About 7,000 acres are contaminated with more than 100 million tons of surface mining wastes.

Sample results show that soil, groundwater, and surface water are contaminated with lead, zinc and cadmium. Risks include contaminated groundwater, soil, or mine wastes. About 5,000 residences within

Environmental Education

To encourage an environmental ethic, Region 7 uses its mascot Charlie Chipmunk to entertain and educate children about the benefits of recycling to help clean neighborhoods, as well as the dangers of lead-based paints to young children. Charlie Chipmunk and his friends make visits to school rooms and assemblies; march in street and park parades; appear at health fairs and have a huge part in making Earth Day an annual success. Charlie tells his stories through booklets, has a rap song and has his own web site: www.epa.gov/region07/kids/charlie.htm. In 1999, Charlie performed for nearly 6,000 children at schools, Earth Day events in Kansas City, Kansas, and the Kansas City Zoo.

Other activities of benefit to children and teachers are the

the sites were found to have contaminated yard soil above EPA's action level for lead. The Missouri Department of Health's 1994 study found that 14 percent of children under seven years old had elevated blood-lead levels. The study concluded that the most significant source of contamination was the residential yard soils.

In 1994, Region 7 began to prioritize the cleanup efforts. Numerous daycare centers and residences were identified as having soil lead concentrations

Environmental Education grants which began in 1992. Through 1999, a total of 222 grants were made in Region 7 totaling \$1,335,442 and given for a variety of projects. While the largest grant available is \$25,000, the smallest grant—just \$200 – was made to a St. Louis kindergarten teacher who developed a video which teaches children about recycling.



Charlie Chipmunk makes appearances at a variety of youth events to spread the recycling message and that kids can be free of lead-paint dangers.

at levels requiring quick action. A removal action began in January 1995 which targeted these daycare centers and residential yards. About 2,500 properties were identified for cleanup. Approximately 1,700 properties have been cleaned. Cleanup should be finished by the fall of 2000.

Community involvement is a significant part of site activities, including a Community Advisory Group and a Technical Assistance Grant. EPA, the Missouri Department of Natural Resources, the Missouri Department of Health and the Agency for Toxic Substances and Disease Registry work together as a team. A health education program at the site alerts parents to the dangers of lead.

Environmental Justice

The region's Environmental Justice (EJ) Program has developed training and a schedule to train EPA staff. Interim regional EJ guidance is under development to determine specific steps which should be taken to address environmental justice in our work. The staff can map sites and communities for EJ to determine if there is a disproportionate burden.

Grants are used in the Environmental Justice program to ensure equal environmental and health protection to everyone. The Dallas County, Iowa, Environmental Health Department used its grant to check blood lead levels in a low-income, minority community. Of 956 children tested, more than 10 percent had blood lead levels equal to or greater than the standard of 10 micrograms per deciliter. The national average is 4.4 percent. More than 42 percent of the county homes were built before 1950 when lead-based paints were commonly used.

Twenty-one children with high blood lead levels, living in 10 homes, were discovered between April-September 1999. Nine of 10 rental units are now considered lead-free. Only five additional children with high blood lead levels have been identified since the program was initiated. The county health department is partnering with private clinics to increase screening efforts, and intends to offer lead testing at spring kindergarten roundups.

American Indian Program

The federal government has the responsibility to work with federally recognized tribes on a government-to-government basis and to ensure that the rights of sovereign tribal governments are fully respected.

Region 7 is home to nine federally recognized American Indian tribes located in Kansas (four), Nebraska (four) and Iowa (one). Region 7 tribes have been collecting data, assessing their environmental conditions and determining priorities for program development. Eight of the nine tribes in Region 7 have been awarded grants. Using these grants, four tribes are in varying stages of developing pesticide programs; four have been assessing the presence of lead paint contamination; four have been testing for radon in reservation homes and other buildings; five have been assessing surface water quality; and six have been using funding to plan for open dump closures,

to operate recycling programs and develop tribal codes.

Risk Management Plans Benefit Rural Areas

Environmental risks due to chemical accidents and explosions are more likely to occur in rural areas than in large city complexes. These risks exist in small, rural communities at facilities where businesses or utilities store large amounts of chemicals, including anhydrous ammonia used as fertilizer, gaseous chlorine used to disinfect drinking water, and propane used as a fuel.

Facilities submitted more than 14,500 risk management plans (RMPs) to EPA in June 1999. Nearly 18 percent or 2,635 of these plans came from Region 7 businesses. Iowa, Kansas, Missouri and Nebraska rank in the top 12 states in the nation for the most RMPs submitted.

Region 7, with state and local partners, has worked to eliminate and minimize potential risks through pollution prevention and emergency planning and preparedness programs. Owners have identified the hazards associated with the chemicals that they manage. Local emergency planning committees coordinate their plans to handle any potential problems.